

REMARKS

The Examiner has rejected Claims 28 and 30-34 under 35 U.S.C. § 103(a) as being unpatentable over Applicant's Admitted Prior Art ("AAPA") in view of U.S. Patent No. 6,469,658 to Courtney et al. ("Courtney"), U.S. Patent No. 5,652,589 to Ono et al. ("Ono"), and U.S. Patent No. 5,793,331 to Anzai et al. ("Anzai"). The Examiner has also rejected Claims 33 and 34 under 35 U.S.C. § 103(a) as being unpatentable over AAPA in view of Courtney and Anzai. In addition, the Examiner has rejected Claim 29 under 35 U.S.C. § 103(a) as being unpatentable over AAPA, Courtney, Ono, and Anzai, and further in view of U.S. Publication No. 2002/0197957 to Kawasaki et al. ("Kawasaki").

Independent Claims 28, 30, 31, and 33 have been amended to no longer refer to an intended use, but rather now require the device/component to include the structure of being "configured to wirelessly transmit audio signals". Minor amendments have also been made to dependent Claims 29, 32, and 34 to improve their form. Claims 1-27 and 35-37 stand previously canceled.

Claims 28-34 are currently pending. The following remarks are considered by applicant to overcome each of the Examiner's outstanding rejections to current Claims 28-34. An early Notice of Allowance is therefore requested.

I. SUMMARY OF RELEVANT LAW

The determination of obviousness rests on whether the claimed invention as a whole would have been obvious to a person of ordinary skill in the art at the time the invention was made. In determining obviousness, four factors should be weighed: (1) the scope and content of the prior art, (2) the differences between the art and the claims at issue, (3) the level of ordinary skill in the art, and (4) whatever objective evidence may be present. Obviousness may not be established using hindsight or in view of the teachings or suggestions of the inventor. The Examiner carries the burden under 35 U.S.C. § 103 to establish a prima facie case of obviousness and must show that the references relied on teach or suggest all of the limitations of the claims.

II. EXAMINER'S RESPONSE TO APPLICANT'S PRIOR ARGUMENTS

On page 2 of the Office Action, the Examiner dismisses all of Applicant's prior arguments relating to the claim language stating "for wirelessly transmitting audio signals to an external wireless receiver" as being entitled to no patentable weight since the claim language related to intended use.

Accordingly, independent Claims 28, 30, 31, and 33 have been amended to now require the device/component be "configured to wirelessly transmit audio signals to an external wireless receiver". As such, independent Claims 28, 30, 31, and 33 have been amended to no longer refer to an intended use, but rather to include the **structure** of actually being "configured" to perform a task.

Therefore, Applicant respectfully notes that all of the modified arguments below **must** be given **patentable weight**, as they are now drawn to claimed structure, **regardless** of whether the claimed structure is present in the **preamble** or in the main body of the claim.

III. REJECTION OF CLAIMS 28 AND 30-36 UNDER 35 U.S.C. § 103(A) BASED ON AIPA IN VIEW OF COURTNEY, ONO, AND ANZAI

On page 4 of the Office Action, the Examiner rejected Claims 28 and 30-35 under 35 U.S.C. § 103(a) as being unpatentable over AIPA in view of Courtney, Ono, and Anzai. These rejections are traversed and believed overcome in view of the following discussion.

Independent Claims 28, 30, 31, 33, each state, in part:

"A... microphone ...**configured to wirelessly transmit audio signals to an external wireless receiver** ..."

"wherein said **antenna** and said **circulator** or said **HF isolator** are arranged in a **common housing of the antenna unit**..." (emphasis added)

As such, Claims 28, 30, 31, and 33 now **require** the **microphone** to be **configured** to wirelessly transmit audio signals.

A. Examiner has Mischaracterizes the Teachings of the Cited References

First, Examiner asserts that AAPA discloses “at least one antenna unit having an antenna and a circulator or an HF isolator”. This, however, misinterprets the teachings of AAPA.

More specifically, AAPA **only** states that it is known to have HF circulators, isolators, or filters **fixedly** installed in HF transmitters or wireless microphones, whereby it is **complicated and expensive to exchange** the HF circulators, isolators, or filters upon a change in frequency. Application, ¶ [0006]. Such HF transmitters or wireless microphones have antenna units which are **completely separate** from unit which holds the HF circulators and/or isolators. As such, AAPA most definitely does **not** disclose an **antenna unit** having an antenna **and** a circulator or an HF isolator. Rather, **only the current Application** actually discloses a circulator and/or HF isolator integrated with an antenna in an antenna unit. Application, ¶ [0007].

Second, Examiner asserts that Anzai teaches that an antenna **unit** can be screwed into a transmitter housing. This, however, misinterprets the teachings of Anzai.

More specifically, Anzai **only** discloses that an **antenna itself** can be screwed into a cordless telephone. Anzai, Col. 1, Lns. 55-60. Anzai does **not** teach an antenna **unit**, which by definition according to the claims **must** have an antenna **and** a circulator and/or HF isolator, can be screwed into a transmitter. In fact, **none** of the cited art actually discloses any unit **which includes a circulator and/or HF isolator** that can be screwed onto any transmitter housing. Rather, as explained in the current application, it is only known to have circulator or isolators **fixedly** installed in the housing of an HF transmitter or wireless microphone. Application, ¶ [0006].

B. Courtney, Ono, and Anzai are All Non-Analogous Art

Courtney relates to a method for creation of planar or complex wave fronts in close proximity to a transmitter array. In particular, this document is related to a stealth bomber. Courtney is completely **silent** with respect to **and device being configured to wirelessly transmit audio signals** to an external wireless receiver. In contrast, the teaching of Courtney is related to a method of measuring an electronic response of an object subjected to a user defined field distribution with a pseudo-plane wave generator wherein the

distance comprises a value of less than $2 D^2/\lambda$ where in the distance and the orientation between the transmitting array and the object are determined. This has **nothing** to do with a wireless microphone system configured to wirelessly transmit audio signals to an external receiver.

Ono is related to a FM-CW multi-beam radar apparatus. This document is completely **silent** with respect to a wireless microphone system **configured** to wirelessly transmit audio signals to an external wireless receiver. Ono merely discloses that an antenna and a circulator can be arranged in a common antenna unit housing.

Anzai discloses a user replaceable flexible retractable antenna. This document is also completely **silent** with respect to a wireless microphone system **configured** to wirelessly transmit audio signals to an external wireless receiver. In fact, this document is related to an antenna for use with a cordless phone. Furthermore, this document only discloses the feature that an antenna unit can be screwed into a transmitter housing. Apart from that, this document has **no connection** to the subject matter of the Claims 28, 30, 31, and 33.

It is well established that nonanalogous art cannot be considered pertinent prior art under § 103 and therefore cannot be relied upon as a “basis for rejection of an applicant's invention.” See MPEP § 2141.01(a) (quoting *In re Oetiker*, 977 F.2d 1443, 1446 (Fed. Cir. 1992)). The determination as to whether a reference is analogous art is two fold. First, it must be decided if the reference is within the field of the inventor's endeavor. If it is not, it must then be determined whether the reference is “reasonably pertinent to the particular problem with which the inventor was concerned.” *In re Oetiker*, 977 F.2d at 1446. The Federal Circuit has held:

A reference is reasonably pertinent if, even though it may be in a different field from that of the inventor's endeavor, it is one which, because of the matter with which it deals, logically would have commended itself to an inventor's attention in considering his problem.

In re Clay, 966 F.2d 656, 659 (Fed. Cir. 1992).

In the present case, the Courtney and Ono references do not satisfy the above well-established test of a reference falling into the category of analogous art. First, the references are not within the field of the instant inventors' endeavor. As previously

discussed, **Courtney** relates to creation of planar or complex wave fronts in close proximity to a transmitter array. In particular, this document is related to a **stealth bomber**. More specifically, Courtney relates to measuring **electronic circuit responses of large objects**. Courtney, Col. 1, Lns. 14-15. Also as discussed above, Ono relates to a FM-CW multi-beam **radar apparatus**. Ono, Abstract, Col. 1, Lns. 5-7.

In contrast, the **current application** relates to a **microphone configured to wirelessly transmit audio signals to an external wireless receiver**.

Further evidencing the different fields of invention between the instant invention, and Courtney and Ono, are the USPTO classifications of the references. *See* MPEP § 2141.01(a). As detailed in the Application Data tab on the PAIR system for the instant application, the instant invention (and thus AAPA) is classified in class 455. In contrast, Courtney is classified in classes 342, 702, 250, and 73; Ono is classified in class 342. The classes are defined as follows:

- Class 455 (Applicant's): Telecommunications
- Class 342 (Courtney and Ono): Communications: directive radio wave systems and devices (e.g., radar, radio navigation)
- Class 702 (Courtney): Data processing: measuring, calibrating, or testing
- Class 250 (Courtney): Radiant Energy
- Class 73 (Courtney): Measuring and Testing

Accordingly, Courtney and Ono are **not** within the field of the instant inventor's endeavors, **nor** are they within the field of the AAPA applied in combination.

Secondly, Courtney and Ono are not reasonably pertinent to the particular problem with which the instant inventors were involved, thus failing the second prong of the test. As previously stated, Courtney relates to planar or complex wave fronts **measuring electronic circuit responses of large objects**; and Ono relates to FM-CW multi-beam **radar apparatus**. In contrast, the instant invention is directed to problems associated with the complicated and expensive exchange of HF circulators and isolators in **microphones** that often also gives rise to technical problems when the **working frequency range** of the microphone needs to be changed. It is clear that the matters with which Courtney and Ono

deal would **not** logically have commended themselves to the instant inventor's attention in considering **any** problem to be solved, including that contemplated in the instant invention.

Therefore, as Courtney and Ono **fail both** prongs of the analogous art test, they are **nonanalogous** art to the instant invention and **cannot** be properly applied in an obviousness analysis.

Moreover, even as the USPTO classification is some evidence of analogy, similarities and differences in structure and function carry still more weight. *In re Ellis*, 476 F.2d 1370, 1372 (C.C.P.A. 1973). The Applicant's invention is directed a microphone **configured to wirelessly transmit audio signals to an external wireless receiver**. In contrast, **neither** Courtney nor Ono perform are configured to wirelessly transmit audio signals to an external wireless receiver. **Instead**, Courtney relates to planar or complex wave fronts **measuring electronic circuit responses of large objects**; and Ono relates to FM-CW multi-beam **radar apparatus**. Hence, the differences in structure and function of the cited references are further evidence of nonanalog between Applicant's invention and Courtney and Ono.

C. No Motivation to Combine Teachings of Cited References

As seen from the descriptions above, the Examiner is combining **references** relating to **disparate technologies** in an attempt to render the current claims obvious. The Office Action does **not** detail **any specific logical reason** why one of ordinary skill in the art would find **any motivation whatsoever** to combine the teachings relating to these **disparate technologies** of an apparatus for **generating** electromagnetic environment where the **plane wave** response of an object can be measured in the electromagnetic near field (i.e. the disclosure of Courtney) with the transmitter housing and antenna of a **microphone of AAPA**. **Absent any reasonable motivation** to combine the teachings of the cited references, it is **impossible** for the Examiner to establish a case of obviousness.

In fact, one of ordinary skill in the art would **not** find any logical motivation to combine the teachings of the cited references in the way Examiner asserts. More specifically, Examiner relies on Fig. 3 of Ono for disclosing an antenna and circulator arranged in a common antenna unit housing. However, Fig. 3 of Ono shows a multibeam **radar apparatus mounted on the front side of a vehicle** and arranged to sense a target.

Ono, Col 5, Lns. 46-61. Such technology is so different from that of AAPA (i.e., a microphone configured to wirelessly transmit audio signals to an external wireless receiver) that one of ordinary skill in the art would find **no motivation whatsoever** to combine the teachings of Ono with those of AAPA, let alone a reasonable expectation of success of such a combination.

Furthermore, the physical structure of the device of Ono (i.e., a multibeam radar apparatus 21 to be mounted on a vehicle which includes multiple beam transmitter-receivers 22A-22D that **do not** need to be exchanged depending upon the operating conditions of the radar device) and that of AAPA (i.e., a microphone designed for individual use which includes a single circulator and/or isolator that **does** need to be exchanged depending upon the desired working frequency range of the microphone) are so different from one another, that one of ordinary skill in the art would never combine the teachings of Ono with those of AAPA.

Moreover, the **only motivation** to provide an antenna and a circulator or HF isolator **in a common antenna unit housing** in a **microphone** that is **configured** to wirelessly transmit audio signals to a wireless receiver, **is provided by the Specification of the current Application *itself***. Therefore, the Examiner's reason appears to be solely based on hindsight.

Applicants respectfully note that *KSR* cautions that such hindsight reasoning based on the Applicants' own disclosure (i.e., in the absence of facts gleaned from the prior art) distorts analysis: "[a] factfinder should be aware, of course, of the **distortion caused by hindsight bias** and must be cautious of arguments reliant on ex post reasoning." Emphasis added.

Further, as MPEP §2174 "Legal Concept of Prima Facie Obviousness"

states:

"[T]o reach a proper determination under 35 U.S.C. 103, the examiner must step backward in time and into the shoes worn by the hypothetical 'person of ordinary skill in the art' when the invention was unknown and just before it was made. In view of all **factual information**, the examiner must then make a determination whether the claimed invention 'as a whole' would have been obvious at that time to that person.

Knowledge of applicant's disclosure must be put aside in reaching this determination, yet kept in mind in order to determine the 'differences,' conduct the search and evaluate the 'subject matter as a whole' of the invention. **The tendency to resort to 'hindsight' based upon applicant's disclosure is often difficult to avoid due to the very nature of the examination process. However, impermissible hindsight must be avoided and the legal conclusion must be reached on the basis of the facts gleaned from the prior art."** (Emphasis added)

The Office Action cites **no facts gleaned from the prior art** to support its conclusion, relying on AAPA's silence. In the **absence of any** independent basis or reason for the alleged combination, Applicants urge that the Office Action's hindsight analysis based on AAPA's silence fails to make a *prima facie* case of obviousness

Any person skilled in the art who is designing wireless microphone systems would have absolutely no indication whatsoever to combine the teachings of AAPA (which discloses the microphone housing and antenna) with the disparate arts of Courtney (which is related to measuring the electronic circuit response of large objects by creating an electromagnetic environment where large the distances ordinarily would not allow such measurement), Ono (which discloses a multibeam radar apparatus where a monostatic antenna is used in sensing a long-distance-away target and a bistatic antenna is used in sensing a short-distance-away target), and Anzai (which relates to a user-replaceable flexible antenna). These four references relate to completely different technical fields, and the Examiner has failed to argue how a combination of these documents could be combined and what the combination of the references would look like.

D. Conclusion

Accordingly, Applicant respectfully asserts that Examiner has failed to establish a *prima facie* case of obviousness of independent Claim 28, 30, 31, and 33 and corresponding Claims 32 and 34 because Claims 32 and 34 are dependant from one of the independent Claims. Therefore, Applicant respectfully requests that Examiner withdraw the rejection of Claims 28 and 30-35 under 35 U.S.C. § 103(a) as being unpatentable over Applicant's Admitted Prior Art in view of U.S. Patent No. 6,469,658 to Courtney et al., U.S. Patent No. 5,652,589 to Ono et al., and U.S. Patent No. 5,793,331 to Anzai et al.

IV. REJECTION OF CLAIMS 33 AND 34 UNDER 35 U.S.C. § 103(A) BASED ON AIPA IN VIEW OF COURTNEY, AND ANZAI

On page 6 of the Office Action, the Examiner rejected Claims 33 and 34 under 35 U.S.C. § 103(a) as being unpatentable over AIPA in view of Courtney and Anzai. These rejections are traversed and believed overcome in view of the following discussion.

As discussed above, independent Claim 33 states, in part:

“A ... microphone ... configured to wirelessly transmit audio signals to an external wireless receiver ...”
(emphasis added)

As discussed above in relation to Examiner's obviousness rejection of Claims 28 and 30-34, (1) Examiner has misinterpreted the teachings of AIPA and Anzai, (2) Ono and Courtney are nonanalogous art to the current Application and AIPA, and (3) there is no motivation to combine the teachings of the cited references, and certainly no reasonable expectation of success of such a combination, other than that provided by the current Application itself.

Accordingly, Applicant respectfully asserts that Examiner has failed to establish a prima facie case of obviousness of Claim 33 and corresponding Claim 34 because Claim 34 is dependant from one of the Independent Claims. Therefore, Applicant respectfully requests that Examiner withdraw the rejection of Claims 33 and 34 under 35 U.S.C. § 103(a) as being unpatentable over Applicant's Admitted Prior Art in view of U.S. Patent No. 6,469,658 to Courtney et al. and U.S. Patent No. 5,793,331 to Anzai et al.

V. REJECTION OF CLAIM 29 UNDER 35 U.S.C. § 103(A) BASED ON AIPA IN VIEW OF COURTNEY, ONO, ANZAI, AND KAWASAKI

On page 8 of the Office Action, the Examiner rejected Claim 29 under 35 U.S.C. § 103(a) as being unpatentable over AIPA in view of Courtney, Ono, Anzai, and Kawasaki.

Claim 29 depends from independent Claim 28. As Claim 28 is allowable, so must be Claim 29. Therefore, Applicant respectfully requests that Examiner withdraw the rejection of Claim 29 pursuant to 35 U.S.C. § 103 as being unpatentable over AIPA in view of U.S. Patent No. 6,469,658 to Courtney et al., U.S. Patent No. 5,652,589 to Ono et al., and

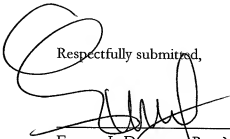
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U.S. Patent No. 5,793,331 to Anzai et al., and further in view of U.S. Publication No.
2002/0197957 to Kawasaki et al.

Based upon the above remarks, Applicant respectfully requests reconsideration of this application and its early allowance. Should the Examiner feel that a telephone conference with Applicant's attorney would expedite the prosecution of this application, the Examiner is urged to contact him at the number indicated below.

Respectfully submitted,



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